

REMARKS

Claims 1-39 are pending in this application upon entry of this amendment. Claims 1-8 and 39 are currently under examination on the merits. Claims 1-3 has been amended to more clearly recite the claimed invention. Support for the amendments can be found in the application as filed. Claims 9-38 have been withdrawn. Applicants reserve the right to file one or more continuation, divisional, or continuation-in-part applications to any withdrawn subject matter. No new matter has been added.

I. The Rejections Under 35 U.S.C. § 112, First Paragraph, Should be Withdrawn

Claims 1-8 and 39 are rejected under 35 U.S.C. § 112, first paragraph, as allegedly failing to comply with the written description requirement. The Office Action alleges that one skilled in the art would not conclude that the instant specification provided adequate support for a method comprising administration of compounds of Formula I where X is C₂-C₅ alkenyl or C₂-C₅ alkynyl as recited in the instant claims.

Applicants respectfully traverse the rejection. Applicants direct the Examiner's attention to section 5.2.1 COMPOUNDS OF FORMULA I. Specifically, paragraph [0169] discloses "[i]n one embodiment, X is C₂-C₅ alkenyl;" and paragraph [0170] discloses "[i]n one embodiment, X is C₂-C₅ alkynyl."

Accordingly, the specification as filed does in fact provide written description support for the claims. Therefore, Applicants respectfully request that this rejection of claims 1-8 and 39 under 35 U.S.C. § 112, first paragraph, be withdrawn.

II. The Rejection under 35 U.S.C. § 103(a) Should be Withdrawn

Claims 1-8 and 39 are rejected under 35 U.S.C. § 103(a) as allegedly obvious over U.S. Patent No. 5,962,437 to Kucera *et al.* ("Kucera I") in view of U.S. patent No. 5,770,584 to Kucera *et al.* ("Kucera II").

The Office Action alleges that the instantly claimed methods of treating RSV infections comprising administering a compound of Formula I would have been *prima facie* obvious to one

of ordinary skill in the art at the time the invention was made. According to the office action, Kucera I clearly motivate one skilled in the art to use compounds of Formula I to treat viral infections and even teach that respiratory syncytial virus infections are a type of infection that may be treated with the compounds of the invention. The office action further states that Kucera II is provided as evidence that compounds having lower alkyl groups in the R₂ position maintain antiviral activity.

According to the Advisory Action, Applicants' remarks are "not persuasive because Applicant's are not claiming use of a 'small sub-genus' of compounds. Rather, Applicant's [*sic*] claims are similar in scope to the scope of compounds disclosed in Kucera." (*See* Advisory Action at page 2).

Applicants respectfully submit that the claims have been amended to recite methods for treating a host infected with respiratory syncytial virus (RSV) comprising administering to a host in need thereof an anti-RSV effective amount of a compound of Formula I or a pharmaceutically acceptable salt thereof wherein R₁ is selected from the group consisting of -NHC(O)Y, where Y is C₁-C₂₂ alkyl; R₂ is selected from the group consisting of -OX, where X is C₁-C₅ alkyl; and R₃ is phosphocholine.

Similar to *In re Baird*, the genus of formula I disclosed in Kucera I encompass millions of compounds. *In re Baird*, 16 F.3d 380 (Fed. Cir. 1994). The Court in *Baird* stated "[w]hile the [prior art] formula unquestionably encompasses bisphenol A when specific variables are chosen, there is nothing in the disclosure of [the prior art reference] suggesting that one should select such variables." *Id.* Indeed, the Federal Circuit found that the prior art reference actually "appears to teach away" from the claimed compound because the prior art reference focused on structurally different and more complex subclasses of compounds within the genus. *Id.* The Office Action alleges that Kucera I discloses treating RSV with the compounds of the invention and further that Kucera motivates those skilled in the art to use the compounds disclosed by Kucera I to treat various types of virus.

However, Kucera does not disclose or suggest the narrow genus of compounds of the claimed invention, as amended, nor provide a suggestion or motivation to utilize shorter branched alkyl, alkenyl or alkynyl groups. Indeed, Kucera is silent with regard to compounds

where R₂ is an O coupled to a C₁-C₅ alkyl. The fact that Kucera discloses the R₂ group as a C₆-C₁₈ alkyl group would not motivate one of ordinary skill in the art to include a C₁-C₅ alkyl group as recited by the instant claims. The Examiner alleges that Kucera II is provided as evidence that compounds having lower alkyl groups in the R₂ position maintain antiviral activity. The Examiner points to Example 6 in Kucera II to allege the suggestion to modify the R₂ position to include lower alkyl groups. However, Kucera II is directed to the treatment of hepatitis virus infections and not generally to infections. Thus, there would be no motivation to combine the Kucera I and Kucera II references.

Accordingly, Kucera I in view of Kucera II does not render the claimed invention obvious. Therefore, Applicants respectfully request that the rejection of claims 1-8 and 39 under 35 U.S.C. § 103(a) be reconsidered and withdrawn.

III. Conclusions

It is respectfully submitted that the rejections to the claims have been overcome. Should the Examiner disagree, Applicants respectfully request a telephonic or in-person interview with the undersigned attorney to discuss any remaining issues and to expedite the eventual allowance of the claims.

Except for issues payable under 37 C.F.R. § 1.18, the Commissioner is hereby authorized by this paper to charge any additional fees during the entire pendency of this application including fees due under 37 C.F.R. 1.16 and 1.17 which may be required, including any required extension of time fees, or credit any overpayment to Deposit Account 50-0310.

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Respectfully submitted,
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